REMARKS

Claims 15-36 are pending in the present application. Claims 15, 18, 27, 30, and 36 have been amended. Claim 36 has been amended to correct the misspelling of the word "composition." No new matter has been added by the claim amendments made herein.

Reexamination of the application and reconsideration of the rejections are respectfully requested in view of the above amendments and the following remarks, which follow the order set forth in the Office Action.

Rejections under 35 USC § 112

Claims 15, 18, 27, and 30 are rejected under 35 USC §112, second paragraph, for allegedly being indefinite for reciting both "pests" and "non-crop pests" in the instant claims. Applicants have amended claims 15, 18, 27, and 30 to recite only non-crop pests. In view of the instant claim amendments, Applicants respectfully request reconsideration and withdrawal of the instant rejection.

Claims 18 and 21-22 are rejected under 35 USC §112, second paragraph, because the phrase "non-living organic materials" is allegedly indefinite. Applicants respectfully traverse the instant rejection. A non-limiting exemplary list of "non-living organic materials" is contained on page 7, lines 1-5 of the specification. For the purpose of clarity, it is noted that the terms "animal, plant, and synthetic" in line 4 modify the term "fibers" in line 5 such that non-living organic materials include animal fibers, plant fibers, and synthetic fibers. Applicants also submit that one of ordinary skill in the art would understand the phrase "non-living organic materials" to be any non-living material that has a substantially organic nature. Further, one of ordinary skill in the art would find no contradiction in the inclusion of "fresh or decaying fruits" or "trees" as non-living organic materials because "non-living" merely implies that only *harvested* fruits or trees are included in the meaning of the phrase. Based on the foregoing, Applicants respectfully submit that the phrase "non-living organic materials" is not indefinite. Accordingly, Applicants request reconsideration and withdrawal of the instant rejection.

Rejection under 35 USC §102

Claims 15-17, 19-20, and 23-26 are rejected under 35 USC §102(b) as being anticipated by Furch et al., EP 0604798, ("Furch"). Applicants respectfully traverse.

The instant application relates to providing new *non-crop* pest control agents that

preferably exhibit broad spectrum activity against *non-crop* pests. See specification, p. 1, line 36 to p. 2, line 5. In contrast, Furch relates to *plant* protection in the agricultural field and discloses the insecticidal and acaricidal activity of N-arylhydrazine derivatives and other compounds against *crop* pests of the Coleoptera, Lepidoptera, and Acarina orders. Furch discloses that all compositions which lend themselves to soil, water, and foliage application and provide effective *plant* protection are suitable. Furch, p. 7, lines 49-51. Further to this point, the only disclosure in Furch wherein amidrazones of Formula I are shown to possess insecticidal activity are in Table IV on pages 37 to 40. However, all the species tested, namely the southern armyworm, the two-spotted spider mite, and the southern corn rootworm, are well-known in the art to damage crops and therefore would be considered *crop* pests.

As discussed in detail at pages 4 and 5 of the instant specification, activity of a compound against pests for plant protection in the agricultural field, i.e., against crop pests, does not generally suggest activity of the same compound against non-crop pests. Crop pest control is always a part of plant protection. In contrast, non-crop pest control relates to, for example, protection of non-living organic materials and public health. The properties of pesticides must be suitable for their specific use. Thus, systemic pesticides that are introduced into plant parts are suitable for controlling piercing-sucking or biting crop pests. However, these same pesticides cannot generally be expected to show equal activity against non-crop pests who do not feed on plant parts. Based on the foregoing, Applicants assert that there is no disclosure in Furch of controlling *non-crop* pests, let alone using the amidrazone compounds of the instant claims for that purpose. As such, Applicants submit that the claims of the instant application are novel over Furch.

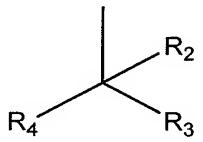
Rejections under 35 USC §103

Claims 18, 21-22, and 27-33 are rejected under 35 USC §103(a) as being allegedly unpatentable over Furch in view of Drabb, Jr., U.S. Patent No. 4,152,436, ("Drabb"). Applicants notice that claims 34-36 have not been explicitly addressed in the Office Action.

With respect to the instant rejection, the Office Action states that "[a] person skilled in the art at the time of the invention would have been motivated to use the methods taught by Drabb, Jr. with the compound as taught by Furch et al." OA, p. 6. Applicants note that the Office Action provides no "rationale, articulation, or reasoned basis to explain why the conclusion of obviousness is correct" as required by In re Kahn, 78 USPQ2d 1329, 1335–36

(Fed. Cir. 2006). Applicants respectfully traverse such assertion and therefore traverse the instant rejection. Drabb discloses the use of acylated pentadienone hydrazones to control insects and ants, and Furch discloses a method of plant protection against crop pests using a broad range of N-arylhydrazine derivatives of the general Formula I.

With respect to Drabb, the hydrazones disclosed therein are structurally significantly different from the N-arylhydrazine derivatives disclosed in Furch and the amidrazones described in the instant application. In general, hydrazones have the structure $R_2C{=}NNR_2$ whereas amidrazones have a tautomeric structure represented by the general formulas $RC(=NH)NHNH_2$ and $RC(NH_2){=}NNH_2$. Moreover, the substituents attached to the hydrazone moiety of the compound disclosed in Drabb differ considerably from the N-arylhydrazine derivatives disclosed in Furch and the amidrazones of the claimed invention. In particular, two substituted styryl groups are attached to the carbon atom of the hydrazone moiety and an acylated, partially saturated N-containing heterocyclic group is attached to the second nitrogen atom of the hydrazone moiety. In contrast, the amidrazone moiety in the compounds of Formula I of the present invention is substituted with a specifically substituted phenyl group, R^1 being C_1-C_6-alkyl, C_3-C_6-alkenyl, C_3-C_6-alkynyl, or C_3-C_6-cycloalkyl, which may be substituted with 1 to 3 halogen atoms, or C_2-C_4-alkyl which is substituted by C_1-C_4-alkoxy, and a group having the following formula



wherein R^2 and R^3 are C_1-C_6-alkyl or may be taken together to form C_3-C_6 cycloalkyl which may be unsubstituted or substituted by 1 to 3 halogen atoms, and R^4 is hydrogen or C_1-C_6-alkyl. Furch discloses certain amidrazones of Formula I. Because of the significant structural differences between the compounds disclosed in Drabb and Furch, one of ordinary skill in the art would not substitute the compositions of Furch into the methods of Drabb as asserted by the Office Action.

In addition, based on the disclosure of Furch, one of skill in the art would not find it obvious that the group of amidrazones of the instant application exhibit broad spectrum activity against non-crop pests. As indicated above, Furch discloses the use of amidrazone compounds to control *crop* pests. As further discussed above, it generally should be noted that the activity of a certain compound against *crop* pests as disclosed in Furch does not generally suggest activity of the same compound against *non-crop* pests. Specification, p. 4-

5. Crop pest control is a part of plant protection whereas non-crop pest control relates to completely different objectives, such as, for example, the protection of non-living organic materials, hygiene, and disease prevention. In addition, treatment methods for crop pests and non-crop pests are generally different. For example, piercing-sucking crop pests or biting crop pests feed on the green parts of the plant. Thus, in order to control such pests, substances that can be introduced into the plant parts by virtue of their water-solubility are favorable. In contrast, non-crop pests, for example, feed on non-living organic materials such as the homes, clothing, and food of human beings and animals. Such non-crop pests are controlled by mostly water-insoluble pesticides in baiting systems or by direct contact. Accordingly, since there are different requirements for insecticides used to control non-crop pests and crop pests, one of skill in the art would not predict that a compound that is suitable for crop protection would show activity against non-crop pests.

With respect to Furch, Applicants assert that Furch gives no suggestion of using the compounds disclosed therein for non-crop pest applications. Rather, the recommendations given in relation to the application of these compounds are focused on crop protection. In particular, Furch teaches that all compositions are suitable which lend themselves to soil, water and foliage application and provide effective plant protection. Furch, p. 7, lines 49 to 51.

Moreover, the N-arylhydrazine derivatives disclosed in Furch generally have only average or poor activity against one or two insect or acarid orders or show no activity at all. The only compound among the broad range of insecticides exhibiting 100% mortality against all tested crop pests belongs to the N-arylhydrazinoyl halides. See Furch, p. 43, Table VI, Example No. 79.

Thus, assuming *arguendo,* that the skilled person considered combining Furch with Drabb despite the fact that the use of a compound as a crop insecticide does not imply its suitability as a non-crop insecticide and despite the differences in chemical structures between the compounds of Furch and Drabb, based on the disclosure of Furch, the skilled person would choose the N-arylhydrazinoyl halides rather than the N-arylamidrazones of the instant application to substitute in the methods of Drabb. Based on the foregoing, Applicants respectfully request reconsideration and withdrawal of the instant rejection.

For at least the foregoing reasons, claims 15-36 are considered allowable. A Notice to this effect is respectfully requested. If any questions remain, the Examiner is invited to contact the undersigned at the number given below.

The Director is hereby authorized to charge any appropriate fees that may be required by this paper, and to credit any overpayment, to Deposit Account No. 23-1925.

Respectfully submitted,

BRINKS HOFER GILSON AND LIONE

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